# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

THE NIELSEN COMPANY (US), LLC,	)
Plaintiff,	)
	) C.A. No. 23-136-GBW-CJB
v.	) (Consolidated)
	)
HYPHAMETRICS, INC.,	) JURY TRIAL DEMANDED
	)
Defendant.	)

## **JOINT CLAIM CONSTRUCTION CHART**

Pursuant to Paragraph 12 of the Court's July 17, 2023 Scheduling Order (D.I. 22) and the Order to Extend Time of Certain Deadlines in the Scheduling Order, Plaintiff The Nielsen Company (US), LLC ("Plaintiff" or "Nielsen") and Defendant HyphaMetrics ("Hypha") have met and conferred, and hereby submit the attached Joint Claim Construction Chart for the claims of United States Patent Nos. 10,970,588 and 11,652,901 (collectively, the "Asserted Patents").

The charts below identify the parties' proposed constructions and identification of intrinsic evidence in support of disputed constructions. Each party reserves the right to rely on intrinsic evidence cited by the other party. Exhibit A to the Joint Claim Construction Chart is a copy of the '588 patent. Exhibit B to the Joint Claim Construction Chart is a copy of the '901 patent. Exhibit C to the Joint Claim Construction Chart is a copy of cited portions of the prosecution file history of United States Patent No. 10,503,998, which the '588 patent claims priority to.

#### POTTER ANDERSON & CORROON

#### /s/ Andrew L. Brown

David E. Moore (#3983)
Bindu A. Palapura (#5370)
Andrew L. Brown (#6766)
Hercules Plaza, 6th Floor
1313 North Market Street
Wilmington, DE 1901
Telephone: (302) 984-6000
dmoore@potteranderson.com
bpalapura@pottersanderson.com

Attorneys for Plaintiff
The Nielsen Company (US), LLC

#### OF COUNSEL:

Paul H. Berghoff
James L. Lovsin
Mateusz J. Kulesza
Alexandra E. MacKenzie
Carlton J Hemphill
Christopher M. Scurry
McDonnell Boehnen Hulbert &
BERGHOFF LLP
300 South Wacker Drive
Chicago, IL 60606
Tel: (312) 913-0001

Steven Yovits
Constantine Koutsoubas
Douglas Lewis
Melvin Gaddy
Jason P. Greenhut
KELLEY DRYE & WARREN LLP
333 West Wacker Drive
Chicago, IL 60606
Tel: (312) 857-7070

Clifford Katz
Jolie Brett Schenerman
KELLEY DRYE & WARREN LLP
3 World Trade Center
175 Greenwich Street
New York, NY 10007
Tel: (212) 808-7800

#### **ASHBY & GEDDES**

#### /s/ John G. Day

John G. Day (#2403) Andrew C. Mayo (#5207) 500 Delaware Avenue, 8<sup>th</sup> Floor P.O. Box 1150 Wilmington, DE 19899 (302) 654-1888 jday@ashbygeddes.com amayo@ashbygeddes.com

Attorneys for Defendant HyphaMetrics. Inc.

#### OF COUNSEL:

Edward A. Pennington Beth Oliak Pennington Oliak PLLC 1055 Thomas Jefferson Street, NW, Suite L35 Washington DC 20007 (202) 897-2725

Dated: December 19, 2023 11218516/14944.00006

# **DISPUTED CONSTRUCTIONS**

Term	Nielsen's Proposed Construction and Intrinsic Evidence <sup>1</sup>	HyphaMetrics's Proposed Construction and Intrinsic Evidence
"a threshold probability value"	Plain and ordinary meaning.	"a threshold probability value" is indefinite under 35 USC 112.
'588 patent, cls. 1, 10, 19	To the extent a construction is needed, Nielsen proposes the following construction:	
	A number representing a probability that (i) when exceeded, indicates that a feature in the image is likely an overlay and (ii) when not exceeded, indicates that the feature in the image is likely not an overlay.	
	Intrinsic Evidence  '588 Patent: 6:19-22, 9:35-38, 12:59-64, and 13:14-22.	
	U.S. Patent No. 10,503,998 File History: Non-Final Office Action (Mar. 4, 2019)	
	Response to Non-Final Office Action (June 4, 2019)	
	Notice of Allowance (Aug. 9, 2019)	
"responsive to the processor determining that the	Plain and ordinary meaning.	Each functional statement, including "determining," "performing," "determining"
assigned probability	To the extent a construction is needed, Nielsen	(second time), "determining" (third time),
exceeds the threshold	proposes the following construction:	"determining" (fourth time) and "accessing"
probability value, the		render the claim language indefinite under 35
processor (i) determining		USC 112.

<sup>1</sup> Nielsen objects to the argumentative way in which Hypha has presented its intrinsic evidence for its proposed constructions in the third column of the chart.

compliance with an advertising requirement, (ii) performing optical character recognition (OCR) on the at least one feature, (iii) determining a channel associated with the at least one feature, (iv) determining a show associated with the at least one feature, (v) determining a hyperlink associated with the at least one feature, or (vi) accessing a hyperlinked object associated with the at least one feature." '588 patent, cls. 1, 10, 19

Responsive to the processor determining that the assigned probability exceeds the threshold probability value, the processor:

(i) determining whether the image meets a condition related to advertising, such as a condition specified in an advertising contract and/or requiring an overlay to be present in one or more images,

#### **Intrinsic Evidence**

<u>'588 Patent</u>, 2:51-55, 2:63-3:2, 6:19-28, 7:37-39, 12:13-17.

U.S. Patent No. 10,503,998 File History: Non-Final Office Action (Mar. 4, 2019) Response to Non-Final Office Action (June 4, 2019) Notice of Allowance (Aug. 9, 2019)

(ii) identifying one or more textual characters represented by the at least one feature,

# **Intrinsic Evidence**

'588 Patent, 2:63-66, 7:46-49, 12:13-18.

(iii) determining a media channel (e.g., from which the image was obtained) represented by the at least one feature.

### **Intrinsic Evidence**

'588 Patent, 2:63-66, 4:46-50, 7:41-49, 9:6-11.

	(iv) identifying media metadata and/or media content (e.g., from which the image was obtained) represented by the at least one feature,  Intrinsic Evidence  '588 Patent, 2:48-51, 7:17-22, 7:46-49, 12:13-21, 12:42-46, 13:2-6.	
	(v) identifying a hyperlink (e.g., a digital reference, such as a Uniform Resource Locator ("URL")) represented by the at least one feature,	
	Intrinsic Evidence '588 Patent, 7:41-46, 12:13-22.	
	or (vi) retrieving data referenced by a hyperlink (e.g., a digital reference, such as a Uniform Resource Locator ("URL")) represented by the at least one feature.	
	Intrinsic Evidence  '588 Patent, 7:41-46, 12:13-22.	
"feature map" <sup>2</sup> '588 patent, cls. 1, 10, 19	Plain and ordinary meaning.	"Feature map" and "probability map" are layers of a convolutional neural network.
	To the extent a construction is needed for "feature map," Nielsen proposes the following construction:	Intrinsic Evidence The feature map network comprises a very deep convolutional neural network having a
	A numerical representation of the at least one feature in the image.	plurality of convolutional layers and max-

<sup>&</sup>lt;sup>2</sup> The parties are seeking construction of "feature map" as used in the phrase "... to create a feature map, wherein the feature map comprises ..." in claim 1, and not "feature map network" in claim 1.

	Intrinsic Evidence  '588 Patent, 5:54-58, 6:10-15, 6:53-58, 7:50-54, 8: 1-16, 8:29-32, 9:26-29, 9:66-10:3, 11:60-67, and Figures 5, 7, and 8.	pooling layers. '588 patent, Col. 1 at 65 through Col. 2 at 1.
"probability map" <sup>3</sup> '588 patent, cls. 1, 10, 19	Plain and ordinary meaning.	"Feature map" and "probability map" are layers of a convolutional neural network.
	To the extent a construction is needed for "probability map," Nielsen proposes the following construction:  A numerical representation of one or more probability values.	Intrinsic Evidence The feature map network comprises a very deep convolutional neural network having a plurality of convolutional layers and max-pooling layers. '588 patent, Col. 1 at 65 through Col. 2 at 1.
	Intrinsic Evidence  '588 Patent, 2:58-63, 5:58-64, 6:15-19, 6:59-7:5,  9:25-38, 10:12-13, 10:34-67, 11:1-12, 12:1-7,  12:59-64, 13:14-22, and Figures 5, 7, and 9.	
"causing storage of data identifying the network communication in association with the panelist"	Plain and ordinary meaning.  To the extent a construction is needed, Nielsen proposes the following construction:	"storage" in the context of all asserted claims including claims 1 and 18, means non-transitory storage, that is storage in which the data is stored for a significant amount of time. The claim does not mention transmission of the
'901 patent, cls. 1 and 18	Causing the data identifying the network communication in association with the panelist to be written to and/or represented using a computer readable storage medium for any duration.  Intrinsic Evidence	stored data, so it should be construed as storing the data for an indefinite, but significant period of time. Alternatively, merely reciting "storage" renders the claim indefinite since there are significant differences in storage and non- transitory storage of data.

<sup>&</sup>lt;sup>3</sup> The parties are seeking construction of "probability map" as used in the phrase "... to create a probability map assigning a probability to ..." in claim 1, and not "... applying a probability map network to the feature map ..." in claim 1.

	<u>'901 Patent</u> : 16:31-39, 16:48-56, 11:15-42, 23:5-15, and Figures 4, 5, 6, and 7.	
"to log network traffic" '901 patent, cls. 1, 18	This term is nonlimiting. It states an intended use for the network communications monitor described in the claim. Therefore, it should not be	the processor creates a log based on the data. "To log network traffic within a household that is monitored by an audience measurement
"logging network traffic" '901 patent, cl. 13	construed.	entity" adds scope and meaning to the claim is scope-limiting.
	Otherwise, plain and ordinary meaning.	Intuincia Eridanaa
	To the extent a construction is needed, Nielsen proposes the following construction:	Intrinsic Evidence The apparatus claim 20 includes a positive recitation of "storage of datain a log of network traffic. A log is vital to understanding
	To record a representation of network traffic.	the scope of each independent claim.
	Intrinsic Evidence  '901 Patent: 5:21-23, 5:31-35, 6:49-52, 6:35-37, 8:59-63, and Figure 1.	
"causing the data identifying the network	Plain and ordinary meaning.	"added to a log" requires the affirmative step of creating a log.
communication in association with the panelist	To the extent a construction is needed, Nielsen proposes the following construction:	
to be added to a log of network traffic"	Adding data identifying the network	
'901 patent, cl. 9	communication in association with the panelist to a log of network traffic.	
	Intrinsic Evidence	
	<u>'901 Patent</u> : 5:31-38, 8:59-63, 13:67-14:2, 14:23-15:8, and Figures 1,5, and 5A.	
"causing transmission of the	Plain and ordinary meaning.	"log" is different from stored data; it is
log of network traffic to a server that collects and	To the extent a construction is needed, Nielsen	generated from stored data
processes logs of network	proposes the following construction:	

traffic from a plurality of households" '901 patent, cl. 10	Causing the log of network traffic to be sent to a server that collects and processes logs of network traffic from a plurality of households.  Intrinsic Evidence  '901 Patent: 11:15-21, 13:67-14:2, 14:23-51, 19:50-55, 20:19-27, and Figures 4, 5, 5A, and 8.	
"store[ing] data identifying the network communication in association with the panelist" '901 patent, cls. 13, 20	Plain and ordinary meaning.  To the extent a construction is needed, Nielsen proposes the following construction:  Writing the data identifying the network communication in association with the panelist to and/or representing the data identifying the network communication in association with the panelist using a computer readable storage medium for any duration.	"storing data" in the context of all asserted claims including claims 13 and 20, means non-transitory stored data, that is storage in which the data is stored for a significant amount of time. The claim does not mention transmission of the stored data, so it should be construed as storing the data for an indefinite, but significant period of time. Alternatively, merely reciting "storage" renders the claim indefinite since there are significant differences in storage and non-transitory storage of data.
	Intrinsic Evidence '901 Patent: 16:31-39, 16:48-56, 11:15-42, 23:5- 15, and Figures 4, 5, 6, and 7.	Intrinsic Evidence Flow chart of Fig. 5 of the '901patent discloses the step of "store data", followed by "store timestamp," and then "end," and thus held indefinitely. Similarly, Fig. 6 of the '901 patent describes step "store data" 665 and "store data" 670 and "store timestamp" 680 followed by "end".
"transmitting the log of network traffic" '901 patent, cl. 18	Plain and ordinary meaning.  To the extent a construction is needed, Nielsen proposes the following construction:	A "log" is created by the network communications monitor and is then transmitted as something different from the stored data. "Transmitting" is not performed until a threshold of time is reached, preferably

Sending the log of network traffic.	one day, or when a threshold amount of data is accumulated.
Intrinsic Evidence	
<u>'901 Patent</u> : 11:15-40, 13:67-14:2, 14:23-	-51, Intrinsic Evidence
19:50-55, 20:19-27, and Figures 4, 5, 5A,	, and 8. '901, Col. 20 at 1-14.
	Fig. 8. Discloses the holding of data until
	thresholds of volume and/or time are reached,
	and the thresholds are set to allow data to
	accumulate. Transmission intervals may be
	could be every day, once a week, once an hour.
	'901, Col. 11 at 15-25.